

25

accordance with the sequence of individual touch points input by the user wherein the updating includes changing the size of at least one adjustable undisplayed hit region.

14. The computer readable storage medium of claim 13, including instructions which cause the device to: determine one of more alternate sequences of characters corresponding to the sequence of individual touch points, and determine a respective probability for each of the alternate sequences of characters and for the displayed sequence of characters; and display a suggested replacement character string comprising a selected one of the alternate sequence of characters when the probability of the selected alternate sequence meets one or more predefined criteria with respect to the probability of the displayed sequence of characters.

15. The computer readable storage medium of claim 14, wherein the one or more predefined criteria include a requirement that the determined probability for the suggested replacement character string be greater than the determined probability for the displayed sequence of characters.

16. The computer readable storage medium of claim 14, including instructions which cause the device to: receive a touch point corresponding to a deletion key icon; delete one or more of the displayed characters to produce a shortened sequence of characters; receive additional individual touch points; and after receiving each of the additional individual touch points: determine and display a suggested character string only when the suggested character string starts with the shortened sequence of characters and the suggested character string meets predefined character string suggestion criteria.

17. The computer readable storage medium of claim 13, wherein the adjustable undisplayed hit region of each key icon has a default size equal to a visible display size of the key icon.

18. The computer readable storage medium of claim 13, wherein updating the size of the adjustable undisplayed hit region for a respective key icon includes determining a probability associated with the respective key icon and determining a size of the adjustable undisplayed hit region in accordance with the determined probability.

19. The computer readable storage medium of claim 18, wherein the probability associated with the respective key icon is determined in accordance with the displayed sequence of characters.

20. The computer readable storage medium of claim 18, wherein the probability associated with the respective key icon is determined in accordance with a plurality of character sequences including the displayed sequence of characters and at least one other sequence of characters consistent with the sequence of individual touch points input by the user.

21. The computer readable storage medium of claim 18, including instructions which cause the device to determine a respective probability for each of a plurality of character sequences consistent with the sequence of individual touch points input by the user; and

wherein the probability associated with the respective key icon is determined in accordance with determined probabilities of the plurality of character sequences, each of which comprises a potential prefix for a next character corresponding to a next touch point input by the user.

26

22. The computer readable storage medium of claim 13, wherein:

the adjustable undisplayed hit region for each key icon comprises:

a visible key area displayed on the touch screen display and

a hidden hit region not displayed on the touch screen display; and

determining the character corresponding to the last received individual touch point in accordance with the adjustable undisplayed hit regions of the displayed key icons comprises:

if the hidden hit regions of two or more key icons overlap with a touch point position that corresponds to the last received individual touch point, then the character corresponding to the key icon in the two or more overlapping key icons with the largest adjustable undisplayed hit region is the determined character.

23. The computer readable storage medium of claim 13, wherein:

the adjustable undisplayed hit region for each key icon comprises:

a visible key area displayed on the touch screen display and

a hidden hit region not displayed on the touch screen display; and

determining the character corresponding to the last received individual touch point in accordance with the adjustable undisplayed hit regions of the displayed key icons comprises:

if the hidden hit regions of two or more key icons overlap with a finger contact that corresponds to the last received individual touch point, then the character corresponding to the key icon in the two or more overlapping key icons with the largest adjustable undisplayed hit region is the determined character.

24. A portable electronic device, comprising:

a touch screen display;

one or more processors;

memory; and

one or more programs stored in the memory, wherein the one or more programs are configured to be executed by the one or more processors, the one or more programs including instructions for:

displaying on the touch screen display a plurality of key icons, each key icon having a fixed displayed size and an adjustable undisplayed hit region of dynamically adjustable size;

receiving a sequence of individual touch points input by a user on the touch screen display, wherein:

each touch point is determined at lift off of a contact from the touch screen display, and

an image with an enlarged version of a character that will be selected as the character corresponding to an individual touch point is displayed prior to lift off of a respective contact, wherein the character image that is displayed prior to lift off is selected in accordance with the adjustable undisplayed hit regions of the displayed key icons; and

processing the received individual touch points by performing operations after receiving each of the individual touch points, the operations including:

forming a user-input directed graph for the sequence of individual touch points received so far;